

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of managing fingers for multipath signals in a wireless communication device, said method comprising:

- receiving said multipath signals at said wireless communication device;
- acquiring one of said multipath signals in a searcher portion of said wireless communication device;
- determining a signal-to-noise ratio (SNR) level of said one of said multipath signals;
- evaluating said one of said multipath signals for categorization into one of a plurality of states using at least one SNR threshold;
- generating a finger assignment by selectively providing said one of said multipath signals for a demodulation operation based upon its state;
- receiving said finger assignment from said searcher portion of said communication device;
- determining a signal-strength for said finger assignment;
- enabling said finger assignment for a combine operation if said signal-strength for said finger assignment satiates a first signal-strength threshold;
- preventing said finger assignment from being deassigned if said signal-strength of said finger assignment satiates a second signal-strength threshold, said second signal-strength threshold being less than said first signal-strength threshold; and
- determining a time period over which said signal-strength of said finger assignment satiates said second signal-strength threshold but is below said first signal-strength threshold,

wherein said finger assignment is allowed to be deassigned if said time period ~~fails to satiate~~exceeds a time threshold.

2. (Original) The method recited in Claim 1 wherein said plurality of states includes three hierarchical states.

3. (Original) The method recited in Claim 1 wherein said plurality of states includes an assigned state, wherein signals associated with said assigned state are used for an active demodulation operation.

4. (Original) The method recited in Claim 1 wherein said plurality of states includes a potential state, wherein signals associated with said potential state are not actively used for an active demodulation operation, but which may be likely candidates for a future demodulation operation.

5. (Currently Amended) The method recited in Claim 1 wherein said plurality of states includes a temporary state, wherein signals associated with said temporary state ~~is~~are not actively used for an active demodulation operation, but which may be likely candidates for categorization in a potential state in a future evaluation.

6. (Previously Presented) The method recited in Claim 1 wherein said one of said multipath signals is categorized according to said SNR level of said one of said multipath signals.

7. (Previously Presented) The method recited in Claim 1 wherein said one of said multipath signals is categorized according to a time period over which said SNR level of said one of said multipath signals exists.

8. (Previously Presented) The method recited in Claim 3 further comprising:
enabling said one of said multipath signals for said demodulation operation if it is
categorized in said assigned state.

9. (Previously Presented) The method recited in Claim 1 wherein said
receiving said multipath signals, acquiring, determining said SNR level, evaluating, and
generating are repeated to provide a quantity of multipath signals at least equivalent to a number
of fingers in a receiver portion of said wireless communication device.

10. (Canceled)

11. (Previously Presented) The method recited in Claim 1 further comprising:
preventing said finger assignment from being deassigned if said time period
satiates said time threshold.

12. (Canceled)

13. (Previously Presented) The method recited in Claim 1 further comprising:
allowing said finger assignment to be deassigned if said finger assignment fails to
satisfy said second signal-strength threshold.

14. (Previously Presented) The method recited in Claim 1 further comprising:
demodulating said finger assignment.

15. (Previously Presented) The method recited in Claim 1 further comprising:
filtering said signal-strength of said finger assignment as determined in said
signal-strength determining.

16. (Previously Presented) The method of Claim 1 further comprising:
categorizing said finger assignment into one of a plurality of states based upon
said signal-strength of said finger assignment.

17. (Currently Amended) The method of Claim 1 further comprising:
categorizing said finger assignment into one of a plurality of states based upon
said signal-strength of said finger assignment and based upon said time period over which said
~~signals~~ signal-strength exists.

18. (Previously Presented) The method of Claim 16 further comprising:
evaluating said finger assignment for said combine operation or for deassignment
based upon its state.

19. (Currently Amended) A wireless communication device to manage
multipath signals and to manage a finger assignment, said communication device comprising:
a searcher adapted to scan for said multipath signals;
a transceiver coupled to said searcher;
a processor coupled to said searcher; and
a computer readable memory unit coupled to said processor, said computer
readable memory unit containing program instructions stored therein that execute, via said
processor, and cause the processor to perform:
receiving said multipath signals at said wireless communication device;
acquiring one of said multipath signals in said searcher of said wireless
communication device;
determining a signal-to-noise ratio (SNR) level of said one of said
multipath signals;
evaluating said one of said multipath signals for categorization into one of
a plurality of states using at least one SNR threshold;

generating a finger assignment by selectively providing said one of said multipath signals for a demodulation operation based upon its state;
receiving said finger assignment;
determining a signal-strength for said finger assignment;
enabling said finger assignment for a combine operation if said signal-strength for said finger assignment satisfies a first signal-strength threshold;
preventing said finger assignment from being deassigned if said signal-strength of said finger assignment satisfies a second threshold, said second signal-strength threshold being less than said first signal-strength threshold; and
determining a time period over which said signal-strength of said finger assignment satisfies said second signal-strength threshold but is below said first signal-strength threshold,
wherein said finger assignment is allowed to be deassigned if said time period ~~fails to satisfy~~ exceeds a time threshold.

20. (Previously Presented) The device recited in Claim 19 wherein said plurality of states includes three hierarchical states.

21. (Previously Presented) The device recited in Claim 19 wherein said plurality of states includes an assigned state, wherein signals associated with said assigned state are used for an active demodulation operation.

22. (Previously Presented) The device recited in Claim 19 wherein said plurality of states includes a potential state, wherein signals associated with said potential state are not actively used for an active demodulation operation, but which may be likely candidates for a future demodulation operation.

23. (Previously Presented) The device recited in Claim 19 wherein said plurality of states includes a temporary state, wherein said temporary state is not actively used

for an active demodulation operation, but which may be likely candidates for categorization in a potential state in a future evaluation.

24. (Previously Presented) The device recited in Claim 19 wherein said one of said multipath signals is categorized according to said SNR level of said one of said multipath signals.

25. (Previously Presented) The device recited in Claim 19 wherein said one of said multipath signals is categorized according to a time period over which said SNR level of said one of said multipath signals exists.

26. (Previously Presented) The device recited in Claim 21 wherein said stored program instructions further cause the processor to perform:

enabling said one of said multipath signals for said demodulation operation if it is categorized in said assigned state.

27. (Previously Presented) The device recited in Claim 19 wherein said receiving said multipath signals, acquiring, determining said SNR level, evaluating, and generating are repeated to provide a quantity of multipath signals equivalent to, or greater than, a number of fingers in a receiver portion of said wireless communication device.

28. (Canceled)

29. (Previously Presented) The device recited in Claim 19 wherein said stored program instructions further cause the processor to perform:

preventing said finger assignment from being deassigned if said time period satiates said time threshold.

30. (Canceled)

31. (Previously Presented) The device recited in Claim 19 wherein said stored program instructions further cause the processor to perform:

allowing said finger assignment to be deassigned if said finger assignment fails to satiate said second signal-strength threshold.

32. (Previously Presented) The device recited in Claim 19 wherein said stored program instructions further cause the processor to perform:

demodulating said finger assignment.

33. (Previously Presented) The device recited in Claim 19 wherein said stored program instructions further cause the processor to perform:

filtering said signal-strength of said finger assignment as determined in said signal-strength determining.

34. (Previously Presented) The device of Claim 19 wherein said stored program instructions further cause the processor to perform:

categorizing said finger assignment into one of a plurality of states based upon said signal-strength of said finger assignment.

35. (Previously Presented) The device of Claim 19 wherein said stored program instructions further cause the processor to perform:

categorizing said finger assignment into one of a plurality of states based upon said signal-strength of said finger assignment and based upon said time period over which said signals strength exists.

36. (Previously Presented) The method of Claim 34 wherein said stored program instructions further cause the processor to perform:

evaluating said finger assignment for said combine operation or for deassignment based upon its state.

37. (Currently Amended) A computer readable medium containing computer readable codes stored therein that are executable by a processor to cause a wireless communication device to implement a method of managing multipath signals, by:

receiving said multipath signals at said wireless communication device;

acquiring one of said multipath signals in a searcher portion of said wireless communication device;

determining a signal-to-noise ratio (SNR) level of said one of said multipath signals;

evaluating said one of said multipath signals for categorization into one of a plurality of states using at least one SNR threshold;

generating a finger assignment by selectively providing said one of said multipath signals for a demodulation operation based upon its state;

receiving said finger assignment;

determining a signal-strength for said finger assignment;

enabling said finger assignment for a combine operation if said signal-strength for said finger assignment satisfies a first signal-strength threshold;

preventing said finger assignment from being deassigned if said signal-strength of said finger assignment satisfies a second threshold, said second signal-strength threshold being less than said first signal-strength threshold; and

determining a time period over which said signal-strength of said finger assignment satisfies said second signal-strength threshold but is below said first signal-strength threshold.

wherein said finger assignment is allowed to be deassigned if said time period ~~fails to satisfy~~ exceeds a time threshold.

38. (Previously Presented) The computer readable medium recited in Claim 37 wherein said plurality of states includes three hierarchical states.

39. (Previously Presented) The computer readable medium recited in Claim 37 wherein said plurality of states includes an assigned state, wherein signals associated with said assigned state are used for an active demodulation operation.

40. (Previously Presented) The computer readable medium recited in Claim 37 wherein said plurality of states includes a potential state, wherein signals associated with said potential state are not actively used for an active demodulation operation, but which may be likely candidates for a future demodulation operation.

41. (Previously Presented) The computer readable medium recited in Claim 37 wherein said plurality of states includes a temporary state, wherein said temporary state is not actively used for an active demodulation operation, but which may be likely candidates for categorization in a potential state in a future evaluation.

42. (Previously Presented) The computer readable medium recited in Claim 37 wherein said one of said multipath signals is categorized according to said SNR level of said one of said multipath signals.

43. (Previously Presented) The computer readable medium recited in Claim 37 wherein said one of said multipath signals is categorized according to a time period over which said SNR level of said one of said multipath signals exists.

44. (Previously Presented) The computer readable medium recited in Claim 39 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

enabling said one of said multipath signals for said demodulation operation if it is categorized in said assigned state.

45. (Previously Presented) The computer readable medium recited in Claim 37 wherein said receiving said multipath signals, acquiring, determining said SNR level, evaluating, and generating are repeated to provide a quantity of multipath signals equivalent to, or greater than, a number of fingers in a receiver portion of said wireless communication device.

46. (Canceled)

47. (Previously Presented) The computer readable medium recited in Claim 37 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

preventing said finger assignment from being deassigned if said time period satiates said time threshold.

48. (Canceled)

49. (Previously Presented) The computer readable medium recited in Claim 37 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

allowing said finger assignment to be deassigned if said finger assignment fails to satiate said second signal-strength threshold.

50. (Previously Presented) The computer readable medium recited in Claim 37 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

demodulating said finger assignment.

51. (Previously Presented) The computer readable medium recited in Claim 37 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

filtering said signal-strength of said finger assignment as determined in said signal-strength determining.

52. (Previously Presented) The computer readable medium recited in Claim 37 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

categorizing said finger assignment into one of a plurality of states based upon said signal-strength of said finger assignment.

53. (Currently Amended) The computer readable medium recited in Claim 37 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

categorizing said finger assignment into one of a plurality of states based upon said signal-strength of said finger assignment and based upon said time period over which said signals strength exists.

54. (Previously Presented) The computer readable medium recited in Claim 52 wherein said computer readable codes are further executable by said processor to implement the method of managing multipath signals, by:

evaluating said finger assignment for said combine operation or for deassignment based upon its state.